

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1           1-16. (Cancelled).

1           17. (Currently Amended) A method of wireless communication, comprising:  
2           transmitting a message to one or more wireless units, said message including (i) a first  
3           control data that causes said one or more wireless units to enable request to send (RTS) and  
4           clear to send (RTS/CTS) data transmissions in transmitting data packets to an access point,  
5           and (ii) a second control data that causes said one or more wireless units to automatically  
6           adjust a fragmentation threshold in response to changes within the wireless transmission  
7           medium based on a finite time duration for data packet transmission taking in account a size  
8           of each data packet and a data rate for transmission of each data packet independent of  
9           ~~whether or not RTS/CTS data transmissions are used~~; and  
10          measuring a transmission error factor and adjusting the fragmentation threshold in  
11          accordance with said measured transmission error factor.

1           18. (Original) The method of claim 17, wherein said message comprises a  
2           multicast data packet intended for said one or more associated wireless units.

1           19. (Previously Presented) The method of claim 17, wherein said second control  
2           data of said message includes a current fragmentation threshold being determined by the  
3           access point (i) comparing the transmission error factor to an upper threshold and reducing a  
4           prior fragmentation threshold to the current fragmentation threshold if the transmission error  
5           factor is greater than the upper threshold and (ii) comparing the transmission error factor to a  
6           lower threshold and increasing the prior fragmentation threshold to the current fragmentation  
7           threshold if the transmission error factor is less than the lower threshold.

1           20. (Previously Presented) The method of claim 19, wherein the current  
2           fragmentation threshold is determined by dividing a maximum fragmentation threshold by a  
3           divisional factor, the divisional factor is decremented when the transmission error factor is  
4           greater than the upper threshold, is incremented when the transmission error factor is less

5 than the lower threshold and remains constant when the transmission error factor is less than  
6 the upper threshold and greater than the lower threshold.

1        21. (Currently Amended) An access point having a logic circuit to transmit a  
2 message to one or more associated wireless unit, wherein said message includes (i) a first  
3 control data that causes said one or more associated wireless units to enable request to send  
4 (RTS) and clear to send (RTS/CTS) data transmissions in transmitting at least one data  
5 packets to said access point, and (ii) a second control data that causes said one or more  
6 associated wireless units to automatically adjust a fragmentation threshold in response to  
7 changes within the wireless transmission medium based on a finite time duration for data  
8 packet transmission taking in account a size of said data packet and a data rate for  
9 transmission of said data packet independent of whether or not RTS/CTS data transmissions  
10 are used, said logic circuit being operable to continue to adjust the fragmentation threshold  
11 through subsequent messages based on a measured transmission error factor.

1        22. (Original) The access point of claim 21, wherein said message comprises a  
2 multicast data packet intended for said one or more associated wireless units.

1        23. (Currently Amended) The access point of claim 21, wherein said message  
2 further includes said second control data includes a current fragmentation threshold being  
3 determined by the access point (i) comparing the transmission error factor to a lower an upper  
4 threshold and reducing a prior fragmentation threshold to the current fragmentation threshold  
5 if the transmission error factor is greater than the upper threshold and (ii) increasing the finite  
6 time duration by increasing the fragmentation threshold if the transmission error factor is  
7 below the lower threshold ~~comparing the transmission error factor to a lower threshold and~~  
8 ~~increasing the prior fragmentation threshold to the current fragmentation threshold if the~~  
9 ~~transmission error factor is less than the lower threshold.~~

1        24. (Currently Amended) The access point of claim ~~23~~21, wherein the current  
2 fragmentation threshold is automatically adjusted by (i) comparing the transmission error  
3 factor to an upper threshold, (ii) decreasing the finite time duration by decreasing the  
4 fragmentation threshold if the transmission error factor is above the upper threshold, (iii)  
5 comparing the transmission error factor to a lower threshold, and (iv) increasing the finite  
6 time duration by increasing the fragmentation threshold if the transmission error factor is

7 ~~below the lower threshold determined by dividing a maximum fragmentation threshold by a~~  
8 ~~divisional factor, the divisional factor is decremented when the transmission error factor is~~  
9 ~~greater than the upper threshold, is incremented when the transmission error factor is less~~  
10 ~~than the lower threshold and remains constant when the transmission error factor is less than~~  
11 ~~the upper threshold and greater than the lower threshold.~~

1       25. (Currently Amended) A machine readable medium including a software  
2 routine to control a logic circuit to transmit a message to one or more associated wireless  
3 unit, wherein said message includes (i) a first control data that causes said logic circuit to  
4 enable request to send (RTS) and clear to send (RTS/CTS) data transmissions in transmitting  
5 data packets to said access point, and (ii) a second control data that causes said one or more  
6 associated wireless units to automatically adjust a fragmentation threshold in response to  
7 changes within the wireless transmission medium based on a finite time duration for a  
8 transmission of one of said data packets taking in account a size of said one of said data  
9 packets and a data rate for transmission of said one of said data packets independent of  
10 ~~whether or not RTS/CTS data transmissions are used and continue to adjust the fragmentation~~  
11 ~~threshold based on a measured transmission error factor and to continue to adjust the~~  
12 fragmentation threshold based on a measured transmission error factor.

1       26. (Original) The machine readable medium of claim 25, wherein said message  
2 comprises a multicast data packet intended for said one or more associated wireless units.

1       27. (Currently Amended) The machine readable medium of claim 25, wherein  
2 said second control data of said message includes a current fragmentation threshold being  
3 determined by the access point (i) comparing the transmission error factor to an upper  
4 threshold, (ii) decreasing the finite time duration by decreasing the fragmentation threshold if  
5 the transmission error factor is above the upper threshold, (iii) comparing the transmission  
6 error factor to a lower threshold, and (iv) increasing the finite time duration by increasing the  
7 fragmentation threshold if the transmission error factor is below the lower threshold~~(i)~~  
8 ~~comparing the transmission error factor to an upper threshold and reducing a prior~~  
9 ~~fragmentation threshold to the current fragmentation threshold if the transmission error factor~~  
10 ~~is greater than the upper threshold and (ii) comparing the transmission error factor to a lower~~  
11 ~~threshold and increasing the prior fragmentation threshold to the current fragmentation~~  
12 ~~threshold if the transmission error factor is less than the lower threshold.~~

1           28.     (Currently Amended) The machine readable medium of claim 27, wherein  
2     said second control data of said message includes a the-current fragmentation threshold is  
3     being determined by dividing a maximum fragmentation threshold by a divisional factor, the  
4     divisional factor is decremented when the transmission error factor is greater than the upper  
5     threshold, is incremented when the transmission error factor is less than the lower threshold  
6     and remains constant when the transmission error factor is less than the upper threshold and  
7     greater than the lower threshold.

1           29.     (Currently Amended) A wireless unit, comprising:  
2             a wireless transceiver to communicate with an access point via a wireless  
3     transmission medium; and  
4             a logic circuit to receive a message from said access point by way of said wireless  
5     transceiver, wherein said message includes (i) a first control data that causes a request to send  
6     (RTS) and clear to send (RTS/CTS) transmission of data to said access point, and (ii) a  
7     second control data that causes automatic adjustment of a fragmentation threshold supported  
8     by said wireless unit in response to changes within the wireless transmission medium based  
9     on a finite time duration for transmission of a data packet taking into account a size of said  
10    data packet and a rate for transmission of said data packet and independent of whether or not  
11    ~~RTS/CTS data transmissions are used~~, said logic circuit to continue to adjust said  
12    fragmentation threshold through subsequent messages based on a measured transmission  
13    error factor.

1           30.     (Original) The wireless unit of claim 29, wherein said message comprises a  
2     multicast data packet.

1           31.     (Currently Amended) The wireless unit of claim 29, wherein said second  
2     control data of said message includes a current fragmentation threshold being determined by  
3     after said access point (i) compares said transmission error factor to an upper threshold and  
4     reduces a prior fragmentation threshold to the current fragmentation threshold if the  
5     transmission error factor is greater than the upper threshold and (ii) compares the  
6     transmission error factor to a lower threshold and increases the prior fragmentation threshold

7 to the current fragmentation threshold if the transmission error factor is less than the lower  
8 threshold.

1 32. (Previously Presented) The wireless unit of claim 29, wherein said second  
2 control data including a reduced fragmentation threshold provided in real-time in response to  
3 a change in the wireless transmission medium due to an increase in RF interference.

1 33-40. (Cancelled).

1 41. (Currently Amended) An access point having a logic circuit to transmit a  
2 message to one or more associated wireless unit, said message includes a first control data  
3 that causes said one or more associated wireless units to adjust a fragmentation threshold in  
4 transmitting data packets to said access point and a second control data that causes said one  
5 or more wireless units to use request to send (RTS) and clear to send (CTS) in the  
6 transmission of data to said access point, said logic circuit to adjust of the fragmentation  
7 threshold based on a time duration for transmission of said message taking into account a size  
8 of said message and a rate for transmission of said message being independent of whether or  
9 not the RTS and CTS are used in the data transmissions and to continue to adjust the  
10 fragmentation threshold through subsequent messages based on a measured transmission  
11 error factor.

1 42. (Previously Presented) The access point of claim 41, wherein said message is  
2 a multicast data packet intended for said one or more wireless units.

1 43. (Previously Presented) The access point of claim 41, wherein said message  
2 further includes a specified fragmentation threshold to be used by said one or more wireless  
3 units.

1 44. (Currently Amended) A machine readable medium including a software  
2 routine executed to control a logic circuit to transmit a message to one or more associated  
3 wireless unit, said message includes (i) a first control data that causes said one or more  
4 associated wireless units to use request to send (RTS) and clear to send (CTS) in the  
5 transmission of data to an access point, and (ii) a second control data that causes automatic  
6 adjustment of a fragmentation threshold supported by said wireless unit in response to

7 changes within the wireless transmission medium based on a finite time duration for a  
8 transmission of a data packet taking in account a size of said data packet and a data rate for  
9 transmission of said data packet and independent of whether or not RTS/CTS data  
10 ~~transmissions are used~~, said logic circuit to continue to adjust said fragmentation threshold  
11 through subsequent messages based on a measured transmission error factor.

1 45. (Previously Presented) The machine readable medium of claim 44, wherein  
2 said message further includes a second control data that causes said one or more associated  
3 wireless units to implement fragmentation threshold in transmitting data packets to said  
4 access point.

1 46. (Previously Presented) The machine readable medium of claim 45, wherein  
2 said message further includes a specified fragmentation threshold to be used by said one or  
3 more associated wireless units.